



# **HPE 3PAR 8000 and 20000 Software Installation and Startup Service**

## **HPE Packaged Support Services**

Designed to provide a smooth startup, HPE 3PAR 8000 and 20000 Software Installation and Startup Service provides deployment of your HPE 3PAR 8000 and 20000 storage software, helping to ensure proper installation in your storage environment as well as helping you increase the benefit from your storage investment.

Complementing your new HPE 3PAR 8000 and 20000 storage software, HPE 3PAR 8000 and 20000 Software Installation and Startup Service provides the necessary activities required to help you deploy your licensed HPE 3PAR 8000 and 20000 software products into operation. With the assistance of your designated IT storage administrator, an HPE service specialist deploys your HPE 3PAR 8000 and 20000 software as more fully described in the Service Feature table below.

This service is applicable only for supported environments. Scripting is not within the scope of the service, but can be accommodated at additional cost (scripting can help enable integration and end-to-end automation within your organization's environment). Please refer to additional exclusions in the Service Limitations section below.

### **Service benefits**

- Allows your IT resources to stay focused on their core tasks and priorities
- Can help reduce implementation time, as well as the impact and risk to your storage environment
- Designed to help ensure a successful implementation by providing HPE installation planning and coordination
- Provides service delivered by a trained specialist and based upon HPE recommended configurations and HPE best practices

### **Service feature highlights**

- Service planning and coordination
- Service deployment
- Installation verification tests (IVT)
- Customer orientation session

**Table 1. Service features**

Feature	Delivery specifications
<b>Service planning and coordination</b>	<p>An HPE service specialist will plan all the necessary activities, including the identification of any prerequisites (see 'Service eligibility'), and schedule the delivery of the service at a time mutually agreed upon by HPE and the Customer, which shall be during local HPE standard business hours excluding HPE holidays, unless otherwise agreed by HPE. Any services provided outside of HPE standard business hours may be subject to additional charges. The service specialist will provide the planning and coordination activities detailed below either remotely or onsite, at HPE's discretion.</p> <p>The service specialist will perform the following installation planning and coordination activities:</p> <ul style="list-style-type: none"> <li>• Communicate with the Customer, including handling queries from the Customer regarding service delivery</li> <li>• Verify, using a predelivery checklist, that all service prerequisites that the Customer is responsible for have been met prior to delivery of the installation services</li> <li>• Schedule the 3PAR software deployment at a mutually agreed-upon time</li> <li>• Facilitate a brief discussion to guide the Customer in defining the software deployment and array configuration objectives based on the Customer's application performance, availability needs, and virtual volume layout</li> <li>• Advise the Customer on HPE 3PAR software deployment best practices</li> <li>• Provide a written installation plan, which will serve as a guide for the coordination of the installation and startup deliverables</li> </ul>
<b>Service deployment</b>	<p>The service specialist will perform the following HPE 3PAR software deployment activities:</p> <ul style="list-style-type: none"> <li>• Coordinate the installation plan</li> <li>• Confirm that all service prerequisites identified on the predelivery checklist have been met by the Customer, including that the required version of the HPE 3PAR Operating System is installed and operational</li> <li>• Verify that product keys for the purchased HPE 3PAR software product are installed and active, and install the keys if necessary</li> <li>• Install HPE 3PAR software according to the product specifications and subject to the limits defined in the 'Service limitations' section</li> </ul> <p>The service specialist will perform installation, configuration, and verification procedures, including:</p> <ul style="list-style-type: none"> <li>• For array-based software titles, integration of the software in accordance with the agreed-upon installation plan and configuration best practices</li> <li>• For software titles external to the array, deposition of the software on a Customer-supplied server and operating environment that meet minimum product prerequisites, activation of the software, and configuration necessary to establish connectivity between the server(s) and the HPE 3PAR storage product</li> </ul>
<b>Installation verification tests (IVT)</b>	<p>The service specialist will perform the appropriate installation verification tests to confirm product functionality, including verification that:</p> <ul style="list-style-type: none"> <li>• Confirm that HPE 3PAR software is operationally ready, including: <ul style="list-style-type: none"> <li>– For HPE 3PAR Application Software Suite for Exchange, Oracle, and SQL, validate that relevant snapshot(s) can be taken and mounted, and that databases and files are accessible</li> <li>– For HPE 3PAR Application Software Suite for Hyper-V, validate that relevant snapshots(s) can be taken and mounted, and that virtual machines are accessible</li> <li>– For HPE 3PAR Reporting Software, create a sample report, as applicable</li> <li>– For HPE 3PAR File Persona Software Suite, verify that the license is installed, that supported file services are started, that file shares can be created as appropriate based on the Customer's environment, that the file system can be mounted on the storage, that file shares can be presented to and are accessible by a client node, and that the high-availability failover/failback feature is configured and operational</li> <li>– For HPE 3PAR Data Optimization Software Suite v2 and for the software titles when purchased standalone, verify that the HPE 3PAR Adaptive Optimization license is installed and ensuring that data collection is enabled, validate that HPE 3PAR Dynamic Optimization volume has migrated from one tier to another, validate for HPE 3PAR Peer Motion software that the source and target arrays are connected and display array configuration status, and for HPE 3PAR Priority Optimization, create a sample/test virtual volume set, configure a policy for that set, and demonstrate that input/output processors (IOPs) or bandwidth is limited based on the policy</li> </ul> </li> <li>• Confirm that the event logs are accumulating data</li> </ul>
<b>Customer orientation session</b>	<p>The service specialist will conduct an orientation session of up to one (1) hour in duration for each of the software products below for which the Customer has purchased the service, with the goal of reviewing the configuration information and demonstrating basic operation of the installed HPE 3PAR software product.</p> <p>During the orientation session, the service specialist may cover the following topics:</p> <ul style="list-style-type: none"> <li>• Provide an overview of the 3PAR software architecture</li> </ul>

- Highlight the basic operation of 3PAR software, which includes:
  - For HPE 3PAR Application Software Suite for Exchange, Oracle, and SQL, demonstrating scheduling, backup of a non-production database, and restoration of the database
  - For HPE 3PAR Application Software Suite for Hyper-V, demonstrating scheduling, backup of non-production virtual machines, and restoration of the virtual machines
  - For HPE 3PAR Reporting Software as applicable, use a host connected to the HPE 3PAR storage product and a virtual volume with test data to simulate a load and demonstrate creation of sample capacity and performance reports, or otherwise provide an overview using reports with demonstration data
  - For HPE 3PAR Data Optimization Software Suite v2 and the software titles when purchased standalone as applicable: for HPE 3PAR Adaptive Optimization, use a host connected to the 3PAR storage product and a virtual volume with test data to demonstrate how to create a policy, show the impact of the policy using a simulated load, and provide an overview of HPE 3PAR Adaptive Optimization reporting capabilities; demonstrate use of HPE 3PAR Dynamic Optimization software to move data between storage/RAID group tiers; demonstrate functionality of the HPE 3PAR Peer Motion Migration Manager for data migration and/or load balancing; review features and demonstrate how to create a policy using HPE 3PAR Priority Optimization
  - For HPE 3PAR File Persona Software Suite, provide an overview of the features of the software and a demonstration of the creation of file shares, file stores, virtual file servers, file provisioning groups, and high-availability failover/failback functionality
- Demonstrate the creation of a virtual volume, if applicable
- Verify that the Customer understands how to gain access to appropriate product documentation
- Help the Customer locate troubleshooting information
- Inform the Customer how to contact HPE for support
- Hold a brief question and answer forum with the Customer

The orientation session is informal, provided on the same day as the installation, is typically conducted at a management console with selected members of the Customer's staff, and is not intended as a classroom activity or substitute for formal product training.

---

## Service limitations

Unless specified in this document or in a separate Statement of Work, activities such as, but not limited to, the following are excluded from this service:

- Integration with any hardware or software components not supported by the HPE 3PAR storage product or HPE 3PAR software
- Implementation of software revisions, including hot fixes, patches, service packs, or upgrades from prior versions, on the Customer's existing SAN, host, and application environment
- For HPE 3PAR Application Software Suite, movement of the Customer's databases from an existing storage system to an HPE 3PAR storage product; data migration is available as a separate service
- For HPE 3PAR Application Software Suite for Oracle, configuration of more than two databases in a single instance, more than one managing host, or more than a single Customer site; configuration of additional database instances, managing hosts, and/or sites can be accommodated at additional cost
- For HPE 3PAR Application Software Suite for SQL, configuration of more than one database instance, more than one managing host, more than a 3-node SQL cluster, or more than a single Customer site; configuration of additional database instances, managing hosts, nodes, and/or sites can be accommodated at additional cost
- For HPE 3PAR Application Software Suite for Exchange, configuration of more than 2,500 mailboxes, more than a 3-node cluster, or more than a single Customer site; configuration of additional mailboxes, nodes, and/or sites can be accommodated at additional cost
- For HPE 3PAR Application Software Suite for Hyper-V, loading of the OS on virtual machines, configuration of more than a single 2-node cluster or more than a single standalone host with more than a total of 10 virtual machines, or activities at more than a single Customer site; configuration of additional clusters or standalone hosts, virtual machines, and/or sites can be accommodated at additional cost

- For HPE 3PAR Reporting Software, database conversion, installation or configuration of more than one HPE 3PAR Reporting Software instance, and delivery of performance analysis or troubleshooting using HPE 3PAR Reporting Software; implementation of additional instances of HPE 3PAR Reporting Software and/or delivery by HPE of performance analysis or troubleshooting using HPE 3PAR Reporting Software can be accommodated at additional cost
- For standalone HPE 3PAR Adaptive Optimization software and in the HPE 3PAR Data Optimization Software Suite v2, design, creation, and implementation of 3PAR Adaptive Optimization policies; policy design, creation, and implementation can be accommodated using the HPE 3PAR Adaptive Optimization Policy Implementation Service, which is available via HPE Proactive Select
- For standalone HPE 3PAR Dynamic Optimization software and in the HPE 3PAR Data Optimization Software Suite v2, implementation by HPE of tasks required to balance the HPE 3PAR storage product; the service provides the Customer with a product overview, advice, and suggested strategies for using 3PAR Dynamic Optimization; any extended/ongoing analysis and/or implementation of 3PAR Dynamic Optimization strategies can be accommodated at additional cost
- For standalone HPE 3PAR Peer Motion and in the HPE 3PAR Data Optimization Software Suite v2, installation of 3PAR Peer Motion software on more than a single host or configuration of storage ports on more than a single array at more than a single Customer site; implementation of data migration or load balancing using 3PAR Peer Motion is available as a separate service
- For standalone HPE 3PAR Priority Optimization and in the HPE 3PAR Data Optimization Software Suite v2, design, creation, implementation, and testing of 3PAR Priority Optimization policies in a production environment; policy design, creation, implementation, and testing in a production environment is available as a separate service
- For HPE 3PAR File Persona Software Suite, deployment of the software on more than one HPE 3PAR array, at more than one physical location, presenting more than one example of each Customer required share service to more than a single client host, configuration across multiple clusters (multiple instances of the service may be ordered for larger configurations, multiple sites, or multiple clusters), or configuration of data replication (data replication deployment is available as a separate service)
- Design or implementation of high-availability and other complex configurations, such as host clustering, except host clustering as specifically stated above
- Design or implementation of host-based logical volumes and associated file system structures
- Redesign or reconfiguration of the existing array for hardware upgrades or software add-ons, including hardware reconfiguration
- Installation of HPE 3PAR Operating System upgrades
- HPE 3PAR Operating System and 3PAR software downgrades; downgrades are limited to currently supported software versions compatible with the HPE 3PAR storage hardware configuration only
- Performance testing or modeling
- Installation or configuration of any additional products that include, but are not limited to, servers, host operating systems, host agent software, multipathing software, host bus adapters, network, SAN fabric, and Enterprise Backup software
- Migration of existing data to the new array or to a new configuration within an existing array, including the use of 3PAR Peer Motion for migration of Customer data or load balancing between arrays
- Loading, management, or manipulation of the Customer's data
- Operational testing of applications or troubleshooting of interconnectivity, network, compatibility, or problems not related to the HPE 3PAR storage product

## Service eligibility

The Customer must meet certain hardware and software prerequisites prior to beginning onsite delivery of the service. These prerequisites include, but are not limited to, the following:

- The Customer's existing computer operating system platform(s) must be supported by and be compatible with the HPE 3PAR software product(s) being installed.
- The Customer's HPE 3PAR storage product must be fully operational in a configuration and environment supported by HPE, and connectivity must be available and operational.
- The Customer must install any recommended host, SAN, or application software upgrades, patches, device drivers, host agents, or multipathing software.
- The Customer is responsible for providing servers/workstations and network provisioning (including appropriate connectivity to the Customer's production environment) that meet the requirements for software products, such as HPE 3PAR Application Software Suite, and HPE 3PAR File Persona Software Suite.
- For HPE 3PAR Application Software Suite, the Customer must ensure that applications or virtual machines are installed, configured, and operational; that application server(s) or virtual machines are in a supported configuration; and that application data or virtual machines reside on the HPE 3PAR storage product.
- For standalone 3PAR Peer Motion and in the HPE 3PAR Data Optimization Software Suite v2, the Customer is responsible for providing SAN connectivity between the fully operational 3PAR source and target storage.

## Customer responsibilities

The Customer will:

- Contact a Hewlett Packard Enterprise service specialist within 90 days of date of purchase to schedule the delivery of the service
- Coordinate deployment activities on third-party-maintained hardware or software (if applicable) with the service specialist
- Ensure that all service prerequisites as identified in the 'Service eligibility' section have been met prior to service delivery
- Complete and return the prerequisite HPE predelivery checklist to the service specialist at least two weeks prior to the start of the service, including array configuration information, as necessary
- Assign a designated person from the Customer's staff who, on behalf of the Customer, will grant all approvals, provide information, and otherwise be available to assist Hewlett Packard Enterprise in facilitating the delivery of this service
- Ensure that all hardware, firmware, and software that the service specialist will need in order to deliver this service are available and that software products are properly licensed
- Ensure the availability, at all times during service delivery, of one or more individuals who will provide administrator-level access to the systems where the work is to be performed
- Provide all necessary network and administration assistance to enable onsite and remote connectivity to the HPE 3PAR storage product that will support installation of HPE 3PAR software, where applicable
- Provide all necessary administration to enable end-to-end connectivity of the HPE 3PAR storage product, including network, SAN fabric, and host
- Provide server and network provisioning that meet requirements for additional software products, such as HPE 3PAR Application Software Suite, HPE 3PAR Reporting Software, and HPE 3PAR File Persona Software Suite

- Ensure that any and all prerequisite HPE 3PAR Operating System, firmware, or driver dependencies for the environment are handled before onsite service delivery begins, including loading the OS on virtual machines used to demonstrate HPE 3PAR Application Software Suite for Hyper-V
- Provide test/sample data used in delivery of the service, when applicable
- Adhere to licensing terms and conditions regarding the use of any HPE service tools used to facilitate the delivery of this service or support tools used to provide ongoing remote monitoring, if applicable
- Be responsible for all data backup and restore operations
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required
- Allow Hewlett Packard Enterprise full and unrestricted access to all locations where the service is to be performed
- Perform other reasonable activities to help HPE identify or resolve problems, as requested by HPE

## General provisions/Other exclusions

The on-site service is delivered on a single HPE 3PAR StoreServ Storage product at one physical site.

- Hewlett Packard Enterprise reserves the right to re-price this service if the Customer does not schedule and provide for subsequent delivery within 90 days of purchase.
- Hewlett Packard Enterprise reserves the right to charge, on a time and materials basis, for any additional work over and above the service package pricing that may result from work required to address service prerequisites or other requirements that are not met by the Customer.
- Hewlett Packard Enterprise's ability to deliver this service is dependent upon the Customer's full and timely cooperation with HPE, as well as the accuracy and completeness of any information and data the Customer provides to HPE.
- The service is delivered during local HPE standard business days and hours, excluding HPE holidays. Service delivery outside these hours is available and subject to additional charges.
- This service is delivered as a single, contiguous event. If Customer resource availability or other Customer restrictions delay installation or require additional visits beyond the defined scope of the service, additional charges may apply.
- This service may be delivered remotely, at HPE's discretion. If the Customer requests onsite delivery, additional charges may apply.
- Travel charges may apply; please consult a local HPE office.

Activities such as, but not limited to, the following are excluded from this service:

- Service deployment on hardware not covered by a Hewlett Packard Enterprise warranty or service maintenance contract
- Service deployment on hardware covered by an unauthorized third-party maintenance contract
- Services that, in the opinion of Hewlett Packard Enterprise, are required due to unauthorized attempts by non-HPE personnel to install, repair, maintain, or modify hardware, firmware, or software
- Service required due to causes external to the Hewlett Packard Enterprise maintained hardware or software
- Any services not clearly specified in this document

## Ordering information

To obtain further information or to order the HPE 3PAR 8000 and 20000 Software Installation and Startup Service, contact a local HPE sales representative and reference the following product numbers:

- HA124A1#5Y1 for HPE 3PAR 8000 Adaptive Optimization Installation and Startup Service (see Notes 1 and 2 for more information)
- HA124A1#5Y3 for HPE 3PAR 8000 Data Optimization Suite v2 Installation and Startup Service (see Notes 1 through 4 for more information)
- HA124A1#5Y4 for HPE 3PAR 8000 Dynamic Optimization Installation and Startup Service
- HA124A1#5Y5 for HPE 3PAR 8000 Reporting Software Installation and Startup Service
- HA124A1#5Y6 for HPE 3PAR 8000 Peer Motion Installation and Startup Service
- HA124A1#5Y7 for HPE 3PAR 8000 Priority Optimization Installation and Startup Service (see Note 4 for more information)
- HA124A1#5YA for HPE 3PAR 8000 Application Suite for Microsoft Exchange Installation and Startup Service
- HA124A1#5YB for HPE 3PAR 8000 Application Suite for Microsoft Hyper-V Installation and Startup Service
- HA124A1#5YC for HPE 3PAR 8000 Application Suite for Oracle Installation and Startup Service
- HA124A1#5YD for HPE 3PAR 8000 Application Suite for Microsoft SQL Installation and Startup Service
- HA124A1#5Y9 for HPE 3PAR 8000 File Persona Suite Installation and Startup Service (see Note 5 for more information)
- HA124A1#5X8 for HPE 3PAR 20000 Adaptive Optimization Installation and Startup Service (see Notes 1 and 2 for more information)
- HA124A1#5XA for HPE 3PAR 20000 Data Optimization Suite v2 Installation and Startup Service (see Notes 1 through 4 for more information)
- HA124A1#5XB for HPE 3PAR 20000 Dynamic Optimization Installation and Startup Service
- HA124A1#5XC for HPE 3PAR 20000 Reporting Software Installation and Startup Service
- HA124A1#5XD for HPE 3PAR 20000 Peer Motion Installation and Startup Service
- HA124A1#5XE for HPE 3PAR 20000 Priority Optimization Installation and Startup Service (see Note 4 for more information)
- HA124A1#5XG for HPE 3PAR 20000 Application Suite for Microsoft Exchange Installation and Startup Service
- HA124A1#5XH for HPE 3PAR 20000 Application Suite for Microsoft Hyper-V Installation and Startup Service
- HA124A1#5XJ for HPE 3PAR 20000 Application Suite Oracle Installation and Startup Service
- HA124A1#5XK for HPE 3PAR 20000 Application Suite for Microsoft SQL Installation and Startup Service
- HA124A1#5XM for HPE 3PAR 20000 File Persona Suite Installation and Startup Service (see Note 5 for more information)

Notes:

1. This service does not include design, creation, and implementation of HPE 3PAR Adaptive Optimization or 3PAR Priority Optimization policies in a production environment.
2. HPE 3PAR Adaptive Optimization Policy Implementation Service, available via HPE Proactive Select, provides design, creation, and implementation of 3PAR Adaptive Optimization policies (see publication 4AA2-3842ENW/ENN).
3. HPE 3PAR Data Optimization Suite v2 includes 3PAR Adaptive Optimization, Dynamic Optimization, Peer Motion, and Priority Optimization software.
4. HPE 3PAR Priority Optimization policy design and implementation in a production environment is available as an HPE Consulting service.
5. Deployment of replication for HPE 3PAR File Persona Software Suite is available via the HPE Data Replication Solution Service for HPE 3PAR Remote Copy (see publication 4AA3-8627ENW/ENN).

